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THE STATUS OF SEALING IN THE SUB-ANTARCTIC ATLANTIC

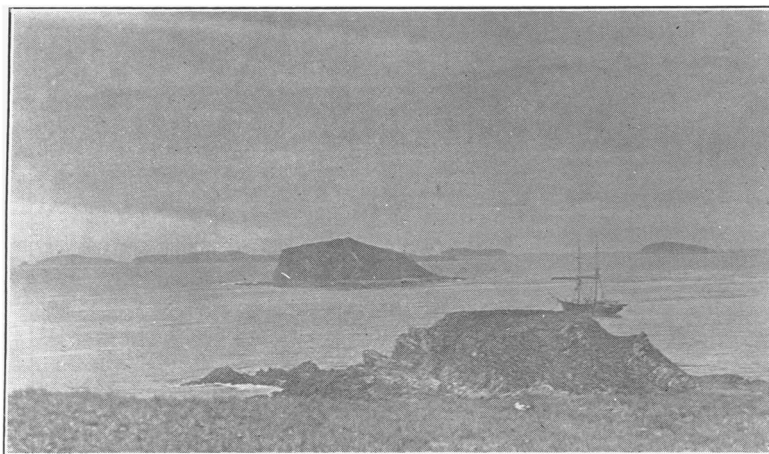
By ROBERT CUSHMAN MURPHY

BROOKLYN MUSEUM

SEALING on the coast of Patagonia, the Falklands, and the islands north and east of Cape Horn began during the third quarter of the eighteenth century. Alexander Dalrymple, writing in 1775, reports that there was at the Falklands an abundance of "Sea-Lions¹ 25 feet long and 19 to 20 round," and also fur seals in "such numbers that they killed eight or nine hundred in a day with bludgeons on one small Islot." Shortly after the American Revolution, New England and British sealers extended their hunting still farther afield, at first to South Georgia, twelve hundred miles east of Cape Horn, and then to the South Orkneys and South Shetlands, well beyond the sixtieth parallel.

The naturalist George Forster, who accompanied Captain James Cook on his renowned voyage toward the South Pole in the year 1775, had written prophetically of the possible exploitation of South Georgia, although even his farsighted imagination had failed to picture the rapid strides which adventurous commercialism would make. "South Georgia," wrote Forster, "besides being uninhabitable, does not appear to contain any single article, for which it might be visited occasionally by European ships. Seals, and sea-lions, of which the blubber is accounted an article of commerce, are much more numerous on the desert coasts of South America, the Falklands, and the New Year's Islands, where they may likewise be obtained at a much smaller risk. If the northern ocean should ever be cleared of whales, by our annual fisheries, we might then visit the other hemisphere, where these animals are known to be numerous. However, there seems to be little necessity to advance so far south as New Georgia in quest of them, since the Portuguese and the North Americans have of late years killed numbers of them on the coast of America, going no farther than the Falkland Islands. It should therefore seem probable, that though Southern Georgia may hereafter become important to mankind, that period is at present so far remote,

¹ Sea-elephants (*Mirounga leonina*).

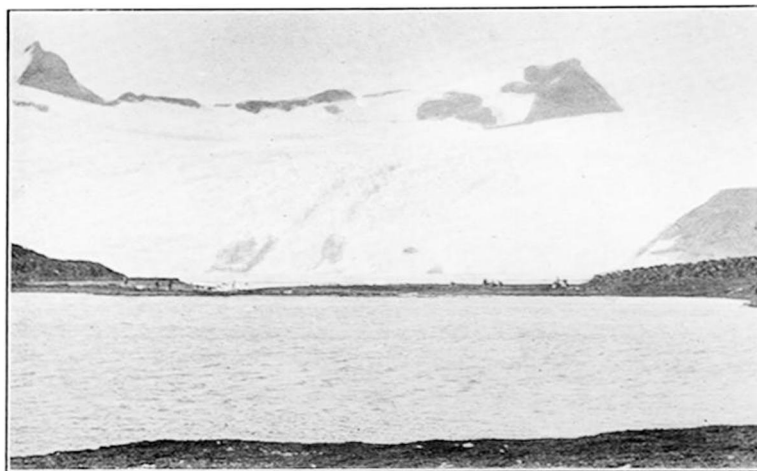


Photographs by the Author.

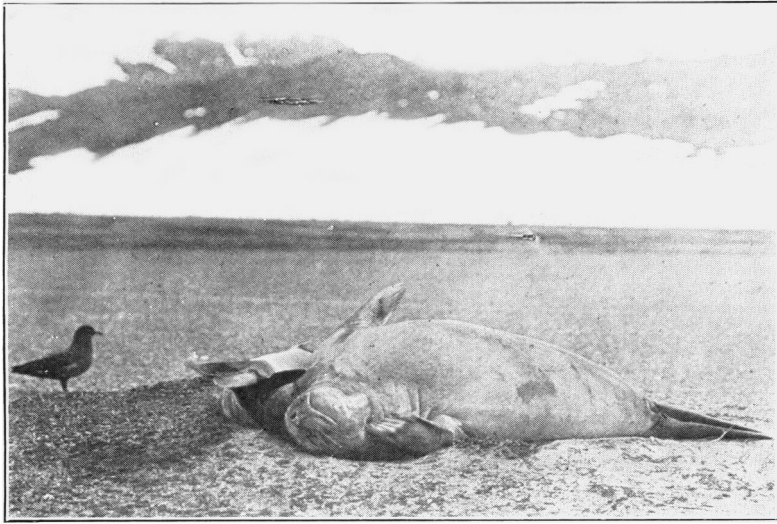
AN AMERICAN SEALING VESSEL, THE BRIG DAISY, OF NEW BEDFORD, MASS., at anchor in the Bay of Isles, South Georgia. In the foreground is a wandering albatross (*Diomedea exulans*) upon its nest.

and perhaps will not happen, till Patagonia and Tierra del Fuego are inhabited, and civilized like Scotland and Sweden." Forster's reference to the possibility of the northern ocean being "cleared of whales" indicates at least that he was not obsessed by the "fallacy of the inexhaustible."

Scarcely a quarter of a century after Forster's visit, sealing at South Georgia had reached its height, and in 1800 Captain Edmund Fanning in the *Aspasia* of New York, one of eighteen sealing vessels at the island, secured the season's prize



AMERICAN SEA-ELEPHANT HUNTERS AT WORK AT THE HEAD OF POSSESSION BAY, South Georgia, March, 1913.



A "COW" AND A "PUP" SEA-ELEPHANT SLEEPING AT THE BAY OF ISLES, South Georgia, December 30, 1912. Both animals are characteristically scratching, or brandishing their flippers. The bird is a skua gull (*Catharacta antarctica*).

catch of 57,000 fur seal skins. This record was never again equaled, although the hunting evidently continued, for, when the Russian explorer, Bellingshausen, sailed along the blustery, uncharted south coast of the island in December, 1819, he met with two English three-masters in one of the fjords. These ships had already been there four months, or through the southern winter, and had carried on a profitable business. But when James Weddell, less than five years later, came to South Georgia, he found that seals of all kinds had become "almost extinct." Weddell's account contains much historical information, and the following portion is well worth quoting:

[Cook's] official report regarding the island of South Georgia, in which he gave an account of the great number of sea-elephants (called by him sea-lions), and fur seals, found on the shores, induced several enterprising merchants to fit out vessels to take them: the elephants for their oil, and the seals for their skins. These animals are now almost extinct; but I have been credibly informed that, since the year in which they were known to be so abundant, not less than 20,000 tons of the sea-elephant oil has been procured for the London market. A quantity of fur seal skins were usually brought along with a cargo of oil; but formerly the furriers in England had not the method of dressing them, on which account they were of so little value, as to be almost neglected.

At the same time, however, the Americans were carrying from Georgia cargoes of these skins to China, where they frequently obtained a price of from 5 to 6 dollars a-piece. It is generally known that the Eng-

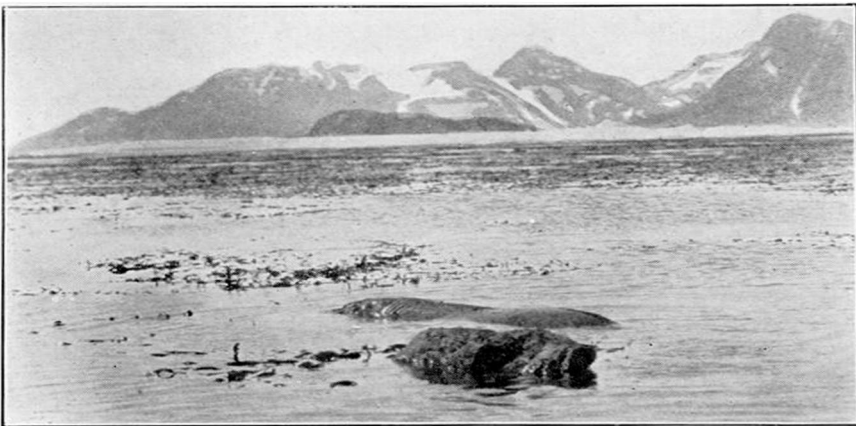
lish did not enjoy the same privilege; by which means the Americans took entirely out of our hands this valuable article of trade.

The number of skins brought from off Georgia by ourselves and foreigners can not be estimated at fewer than 1,200,000.

Of seals at the South Shetlands, where Weddell's two crews killed "upwards of 2,000" sea-elephants during the same voyage, the sagacious mariner writes in an economic vein worthy of a later age:

The quantity of seals taken off these islands, by vessels from different parts, during the years 1821 and 1822, may be computed at 320,000, and the quantity of sea-elephant oil, at 940 tons. This valuable animal, the fur seal, might, by a law similar to that which restrains fishermen in the size of the mesh of their net, have been spared to render annually 100,000 furs for many years to come. This would have followed from not killing the mothers till the young were able to take the water; and even then, only those which appeared to be old, together with a proportion of the males, thereby diminishing their total number, but in slow progression.

Since 1825 fur sealing at the southern Atlantic islands has been a decadent commerce. As the prey became scarcer, the brave fleets of the early days gave way to lonely, prowling schooners which poached from the fur seal rookeries of the Falklands, or reaped the meager harvest of a few seasons' repletion at South Georgia. Fur seals are believed to have been practically exterminated at the latter island about 1874, but rumor has it that a New England vessel made a small, illegal catch there in 1907. About the middle of February, 1915, some Norwegian whalers discovered a single fur seal on the beach near the eastern end of South Georgia. This forlorn veteran was promptly knocked on the head, and so the tale ends.



A BULL SEA-ELEPHANT SWIMMING AWAY FROM THE OBSERVER, AND ABOUT TO ENTER THE KELP FIELDS OF THE BAY OF ISLES. South Georgia, January 6, 1913.



A NEW BEDFORD SEALER ABOUT TO LANCE A BULL SEA-ELEPHANT AT THE BAY OF ISLES, 1912, and March 14, 1913. 1,641 sea-elephants were killed at this island by the crew of a single American sealing vessel.

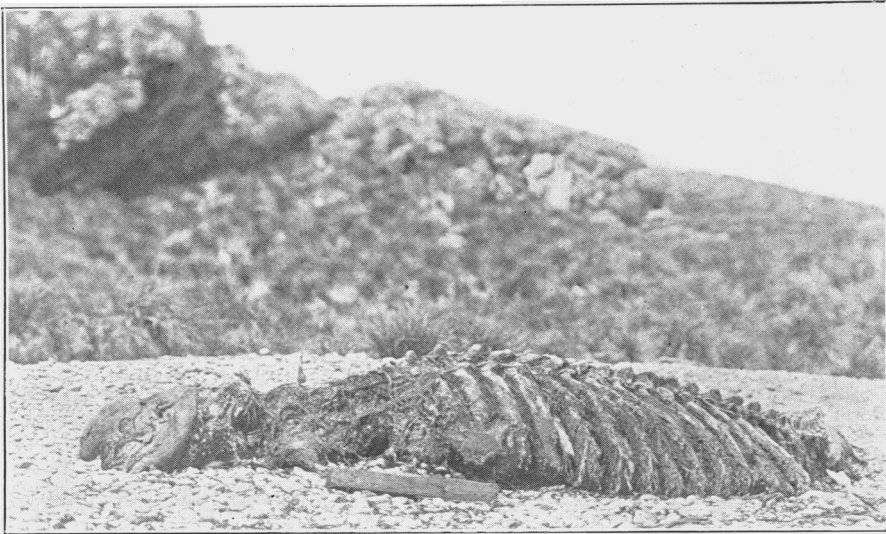
The story of the sea-elephant is not unlike that of the fur seal. The species was cleaned out successively on the South American coast, the Falklands, Tristan da Cunha, and the South Orkneys and Shetlands. At South Georgia persistent killing pushed it so near the verge of utter extinction that in 1885 the crew of a Connecticut schooner during ten weeks of the breeding season (September to January) was able to find only *two* of the animals. From before that date, however, until after the beginning of the twentieth century, the seat of the "elephant oil" traffic was transferred from the south Atlantic to the fresher islands of the Indian Ocean, and so the species was given an opportunity partially to regain its foothold at South Georgia. During the last few years hunting has been resumed there, not only by occasional sailing ships from American ports and elsewhere, but also by one of the South Georgia whaling companies, which, through the employment of steam vessels and highly efficient methods, has made extensive inroads upon the male sea-elephants after the end of the breeding season, as many as 6,000 bulls having been killed during one summer.

In taking sea-elephants, the hunters plan first to drive the animals as near to the water as can be done without risk of their escaping. After this they are clubbed, lanced, or shot, or all three if necessary. Sometimes they can be frightened and sent bounding toward the sea by the sound of small stones rattled in an iron pail. If, however, they prove too sluggish or

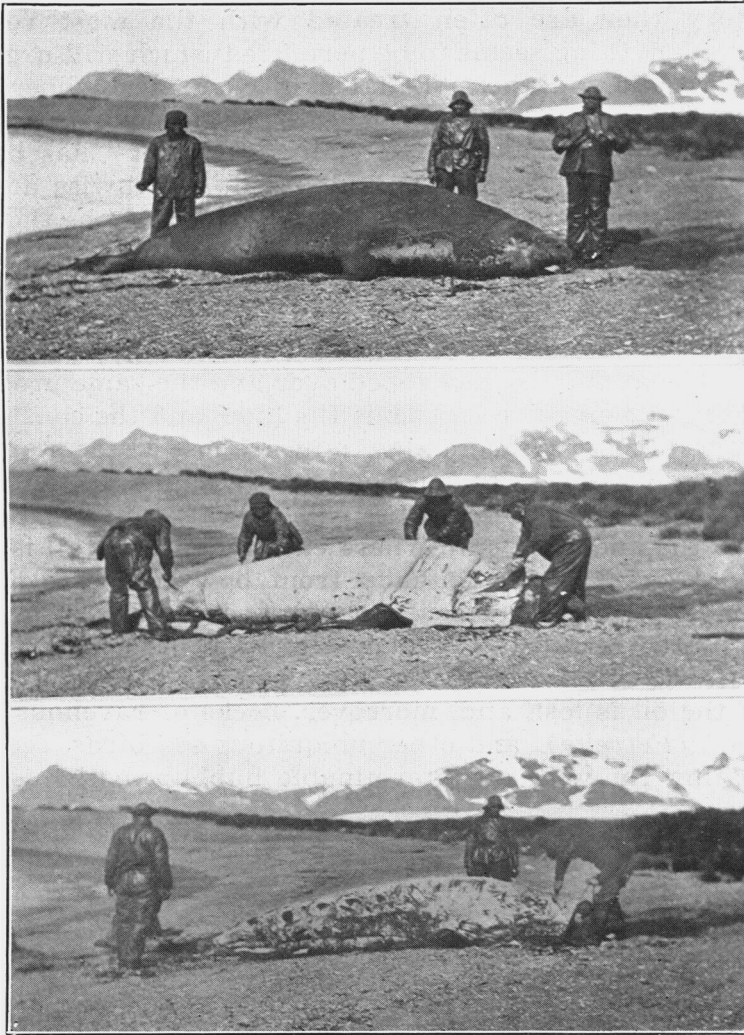
refractory they are often treated with the most revolting brutality; anything seems to be permitted which will urge them beachward and so lighten the labor of carrying blubber.

The old American method of utilizing the blubber is wasteful in every stage. After the slain "elephant" has been allowed to bleed thoroughly, the hide is slit lengthwise down the back, and then transversely in several places from the dorsal incision to the ground. The flaps of hide are next skinned off, and the remaining investment of white blubber, which may have a maximum thickness of about eight inches, is dissected away from the underlying muscle and cut into squarish blanket-pieces. The animal is then rolled over and the same process repeated on the ventral side. Thus the hide, and the considerable amount of blubber which clings to it, are lost at the start.

The blanket-pieces of the blubber are hauled to the water's edge to be strung on short ropes called "raft-tails." These are towed to the anchored ship where each laden raft-tail is looped about a hawser which extends from bow to stern, and the blubber is permitted to soak for forty-eight hours, or thereabouts, until the red blood corpuscles have been practically all washed away. During the soaking process a certain proportion of the oil is lost, and, moreover, flocks of ravenous "Cape pigeons" (*Petrella*), and other ubiquitous sea birds, feed upon the floating fat with an interminable hubbub, both night and



THE STRIPPED CARCASS OF A SEA-ELEPHANT, WHICH HAD BEEN KILLED ONE OR MORE YEARS EARLIER, lying on the South Georgian beach. Thousands of seal remains, in all stages of slow decomposition, tell of the former slaughter and of the wasteful methods.



THE THREE STAGES IN THE DISPOSAL OF A SEA-ELEPHANT, according to the method of the American sealers. The upper photograph shows a bull sea-elephant which was lanced by the writer at the Bay of Isles, South Georgia, on February 17, 1913. The second picture illustrates the removal of the hide, which is cut off in small flaps, leaving the blubber exposed. A curved knife with an eight-inch blade is used in skinning, and, by means of a long, sweeping stroke, the hide is cut away as closely and cleanly as possible. The lower picture shows the carcass completely stripped of its dorsal blubber, which has been dragged to the adjacent cove. The carcass is now ready to be rolled over so that the hide and blubber of the ventral surface may be removed in the same manner. Photographs by Captain B. D. Cleveland.

day. When the blubber is hauled on board it is cut into narrow strips called "horse pieces," and is afterwards "minced." The mincing differs from the same process in sperm whaling only in that the fat is cut very finely with hand knives. At this stage

an additional loss of oil occurs, particularly if the temperature of the air chances to be well above the freezing point. Finally the minced blubber is "tried out" in the familiar deck try-works of the old whaling type. There is so little residue or "scrap" from boiled sea-elephant blubber that the Heard Island sealers of last century used to calculate "a cask of oil from a cask of blubber."

The method as practised by Norwegian whalers at South Georgia is more economical, inasmuch as the chunks of sea-elephant blubber are left attached to the skin, and loaded into a steamer's hold, after which the cargo—hide, fat, blood, dirt and all—is dumped into steam try-works at the whaling station and reduced to oil and slag.

During fifteen months of 1914–1915, 850,000 gallons of sea-elephant oil are said to have been exported from South Georgia by the Norwegian whalers. The sea-elephants can not long withstand such a toll as that, and the question as to whether the magnificent species is to be perpetuated will depend upon protective legislation which, it is to be fervently hoped, the British government will see fit to enact after the war. The difficulties and expenses of the modern whale fishery at South Georgia make it almost impossible for any species of whale to be completely extirpated, however persistently it may be chased, but the unfortunate sea-elephants have no such hope of preservation. Slow, unsuspicious, gregarious, they can be hunted profitably until the last one has gone to his ancestors and the tragedy of the antarctic fur seal is repeated.